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APPLICATION

10

FOR UNITED STATES LETTERS PATENT

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SPECIFICATION

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TO ALL WHOM IT MAY CONCERN:

25 BE IT KNOWN THAT I, RODNEY L. RICHARDSON, a citizen of
UNITED STATES OF AMERICA, have invented a new and useful
REMOVABLE VEHICLE DOOR PROTECTOR of which the following is a
specification:

REMOVABLE VEHICLE DOOR PROTECTOR

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BACKGROUND OF THE INVENTION

Field of the Invention

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The present invention relates to door protectors and more particularly pertains to a new door protector for preventing dents to a vehicle door caused by doors of adjacently parked vehicles when the vehicle is parked.

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Description of the Prior Art

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The use of door protectors is known in the prior art. U.S. Patent No. 5,333,923 describes a device that is attached to the wheel wells of a vehicle so that it extends along the length of the car and thereby protects it from dents. This device is not easily removed and attached and requires brackets to be secured to an inner wall of the wheel wells. Another type of door protector is U.S. Patent No. 5,62,139 that comprises a plurality of strips that may be positioned on a vehicle along its sides and into locking mechanisms for locking the strips together in a substantially linear orientation. Yet another such device is U.S. Patent No. 5,184,857 that includes a plurality of bumpers secured together with tethers. The end bumpers have hooks thereon for attaching the bumpers to the wheel wells of the vehicle.

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While these devices fulfill their respective, particular objectives and requirements, the need remains for a device that is more simple in its use.

Additionally, unlike previous systems and devices, a new device should be utilized which does not risk damaging the paint of a vehicle while it is being attached to and removed from the vehicle.

5 SUMMARY OF THE INVENTION

The present invention meets the needs presented above by generally comprises an elongated rod that has a first end and a second end. The rod includes a first section and a second section wherein the first section is
10 removably extendable into the second section so that the rod is selectively telescoping. A first coupler is attached to the first end of the rod for selectively attaching the first end to a first edge of a vehicle door. A second coupler is attached to the second end of the rod for selectively attaching the second end to a second edge of the door so that the rod
15 extends between the first and second edges of the door.

There has thus been outlined, rather broadly, the more important features of the invention in order that the detailed description thereof that follows may be better understood, and in order that the present
20 contribution to the art may be better appreciated. There are additional features of the invention that will be described hereinafter and which will form the subject matter of the claims appended hereto.

The objects of the invention, along with the various features of
25 novelty which characterize the invention, are pointed out with particularity in the claims annexed to and forming a part of this disclosure.

BRIEF DESCRIPTION OF THE DRAWINGS

30 The invention will be better understood and objects other than those set forth above will become apparent when consideration is given to the

following detailed description thereof. Such description makes reference to the annexed drawings wherein:

Figure 1 is a front in-use view of a removable vehicle door protector
5 according to the present invention.

Figure 2 is a perspective view of the present invention.

Figure 3 is a cross-sectional view taken along line 3-3 of Figure 1 of
10 the present invention.

Figure 4 is a cross-sectional view taken along line 4-4 of Figure 2 of the present invention.

15 **DESCRIPTION OF THE PREFERRED EMBODIMENT**

With reference now to the drawings, and in particular to Figures 1 through 4 thereof, a new door protector embodying the principles and concepts of the present invention and generally designated by the reference
20 numeral 10 will be described.

As best illustrated in Figures 1 through 4, the removable vehicle door protector 10 generally comprises an elongated rod 12 that has a first end 14 and a second end 16. The rod 12 includes a first section 18 and a
25 second section 20 wherein the first section 18 is removably extendable into the second section 20 such that the rod 12 is selectively telescoping. The rod 12 has a substantially cylindrical cross-section taken perpendicular to a longitudinal axis of the rod. Each of a plurality of elastomeric bands 22 is positioned on and extends around the rod 12. The
30 bands 22 protect a door 6 of a vehicle 5 when the rod 12 is positioned against the door 6.

A first coupler 24 is attached to the first end 14 of the rod 12 for selectively attaching the first end 14 to a first edge 7 of the door 6. The first coupler 24 includes a first leg 26, a second leg 28 and a central portion 30 attached to each of the first 26 and second 28 legs such that the first 26 and second 28 legs each extend in generally the same direction with respect to each other. The first edge 7 of a vehicle door 6 is selectively positioned between said first 26 and second 28 legs. A post 32 is attached to the first leg 26. The post 32 extends in the same direction as the first leg 26. The post 32 is attached to the first end 14 of the rod 12 such that the first 26 and second 28 legs extend toward, or in the direction of, the second end 16 of the rod 12. The first coupler 24 preferably comprises an elastomeric material though a plastic material may be used as well. A distance from the longitudinal axis of the rod 12 to an outer surface 13 of the rod 12 is less than a distance from the longitudinal axis to the first leg 26. This ensures that the rod 12 does not touch the door 6 when the first coupler 24 is positioned on the first edge 7.

A second coupler 34 is attached to the second end 16 of the rod 12 for selectively attaching the second end 16 to a second edge 8 of the door 6 such that the rod 12 extends between the first 7 and second 8 edges of the door 6. The second coupler 34 includes a first arm 36, a second arm 38 and a middle section 40 attached to each of the first 36 and second 38 arms such that the first 36 and second 38 arms extend in generally the same section with respect to each other. The second edge 8 of the door 6 is selectively positioned between the first 36 and second 38 arms. A sleeve 42 is attached to and extends in the same direction as the first arm 36. The second end 16 of the rod 12 extends into and is attached to the sleeve 42 such that the first arm 36 extends toward and is aligned with the first leg 26. Alternatively, both the sleeve 42 and the post 32 may be integral with the rod 12. The second coupler 34 preferably comprises an

elastomeric material, though again plastic may be utilized. The elastomeric material may include foamed elastomers as well. The distance from the longitudinal axis of the rod 12 to the outer surface 13 of the rod 12 is less than a distance from the longitudinal axis to the first arm 36 for the same reasons as mentioned previously.

A biasing member 44 is mounted on the second coupler 34 for selectively biasing the door 6 away from the first arm 36 and toward the second arm 38. The biasing member 44 includes a panel 46 that is attached to the sleeve 42 and has a free end 48 positioned between the first 36 and second 38 arms. A threaded rod 50 is threadably coupled to and extends through the first arm 36 and toward the second arm 38. The threaded arm 50 abuts the panel 46. The rod 50 may be moved toward the second arm 38 such that the door 6 is releasably secured between the panel 46 and the second arm 38.

In use, the rod 12 is lengthened to its required length and is attached to the vehicle door 6 using the first coupler 24 and second coupler 34 as shown in Figure 1. The rod 12 is positioned generally between the window and a bottom edge of the door 6. The rod 12 protects the door 6 from other doors which are opened adjacent to the vehicle 5. Adjacent doors will strike the rod 12 instead of the door 6 and the door 6 will not be damaged. By using a simple biasing member 44, the protector 10 is easily placed onto or removed from the door 6.

With respect to the above description then, it is to be realized that the optimum dimensional relationships for the parts of the invention, to include variations in size, materials, shape, form, function and manner of operation, assembly and use, are deemed readily apparent and obvious to one skilled in the art, and all equivalent relationships to those illustrated

in the drawings and described in the specification are intended to be encompassed by the present invention.

5 Therefore, the foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.